

Claims

1. An information processing apparatus which is connected to other information processing apparatuses and which decrypts and uses encrypted value information, characterized by comprising:

storage means for storing usage information including the key needed to decrypt said value information, usage conditions of said value information, and transfer status information which indicates whether said value information has been transferred;

supply means for supplying said value information together with appropriate transfer information including said key contained in said usage information to said other information processing apparatuses when said usage conditions contained in said usage information stored by said storage means are right and said transfer status information contained in said usage information indicates that said value information is not transferred;

first change means for changing said transfer status information to indicate that said value information has been transferred if said value information and said transfer information has been supplied to said other information processing apparatuses by said supply means;

sending means for sending an appropriate control signal to said other information processing apparatuses if said transfer status information contained in said usage information stored by said storage means indicates that said value information has been transferred and

the transfer of said value information to said other information processing apparatuses is cancelled; and

second change means for changing said transfer status information to indicate that said value information is not transferred when a reply signal is received from said other information processing apparatuses in response to said control signal sent by said sending means.

2. The information processing apparatus according to claim 1, characterized in that:

said storage means is configured by a plurality of blocks divided into memory areas which store said usage information; and

said information processing apparatus further comprises,

computation means for computing a hash value by applying a hash function to all the multiple pieces of said usage information stored in said blocks composing said storage means,

hash value storage means for storing has values,

determination means for determining whether said storage means has been falsified, based on the results of comparison between said hash value computed by said computation means and an appropriate hash value stored in said hash value storage means, and

control means for controlling the supply from said supply means, based on the determination made by said determination means.

3. An information processing method for an information processing apparatus which is connected to other information processing

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apparatuses and which decrypts and uses encrypted value information, characterized by comprising:

a storage step of storing usage information including the key needed to decrypt said value information, usage conditions of said value information, and transfer status information which indicates whether said value information has been transferred;

a supply step of supplying said value information together with appropriate transfer information including said key contained in said usage information to said other information processing apparatuses when said usage conditions contained in said usage information stored by said storage step are predetermined conditions and said transfer status information contained in said usage information indicates that said value information is not transferred;

a first change step of changing said transfer status information to indicate that said value information has been transferred if said value information and said transfer information has been supplied to said other information processing apparatuses by said supply step;

a sending step of sending an appropriate control signal to said other information processing apparatuses if said transfer status information contained in said usage information stored by said storage step indicates that said value information has been transferred and the transfer of said value information to said other information processing apparatuses is cancelled; and

a second change step of changing said transfer status information to indicate that said value information is not transferred when a reply

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signal is received from said other information processing apparatuses in response to said control signal sent by said sending step.

4. A providing medium that provides a computer-readable program for executing a process to an information processing apparatus which is connected to other information processing apparatuses and which decrypts and uses encrypted value information, characterized in that said process comprises:

a storage step of storing usage information including the key needed to decrypt said value information, usage conditions of said value information, and transfer status information which indicates whether said value information has been transferred;

a supply step of supplying said value information together with appropriate transfer information including said key contained in said usage information to said other information processing apparatuses when said usage conditions contained in said usage information stored by said storage step are predetermined conditions and said transfer status information contained in said usage information indicates that said value information is not transferred;

a first change step of changing said transfer status information to indicate that said value information has been transferred if said value information and said transfer information has been supplied to said other information processing apparatuses by said supply step;

a sending step of sending an appropriate control signal to said other information processing apparatuses if said transfer status

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information contained in said usage information stored by said storage step indicates that said value information has been transferred and the transfer of said value information to said other information processing apparatuses is cancelled; and

a second change step of changing said transfer status information to indicate that said value information is not transferred when a reply signal is received from said other information processing apparatuses in response to said control signal sent by said sending step.

5. An information processing apparatus which is connected to other information processing apparatuses and which decrypts and uses encrypted value information, characterized by comprising:

reception means for receiving said value information supplied from said other information processing apparatuses and transfer information containing the key needed to decrypt said value information;

storage means for storing said transfer information received by said reception means;

deletion means for deleting said transfer information stored in said storage means when an appropriate control signal is received from said other information processing apparatuses; and

sending means for sending an appropriate reply signal when said transfer information is deleted by said deletion means.

6. The information processing apparatus according to claim 5, characterized in that said storage means is configured by a plurality

of blocks divided into memory areas which store said usage information; and

said information processing apparatus further comprises,

computation means for computing a hash value by applying a hash function to all the multiple pieces of said usage information stored in said blocks composing said storage means,

hash value storage means for storing has values,

determination means for determining whether said storage means has been falsified, based on the results of comparison between said hash value computed by said computation means and an appropriate hash value stored in said hash value storage means, and

control means for controlling the supply from said supply means, based on the determination made by said determination means.

7. An information processing method for an information processing apparatus which is connected to other information processing apparatuses and which decrypts and uses encrypted value information, characterized by comprising:

a reception step of receiving said value information supplied from said other information processing apparatuses and transfer information containing the key needed to decrypt said value information;

a storage step of storing said transfer information received by said reception step;

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a deletion step of deleting said transfer information stored by said storage step when an appropriate control signal is received from said other information processing apparatuses; and

a sending step of sending an appropriate reply signal when said transfer information is deleted by said deletion step.

8. A providing medium that provides a computer-readable program for executing a process to an information processing apparatus which is connected to other information processing apparatuses and which decrypts and uses encrypted value information, characterized in that said process comprises:

a reception step of receiving said value information supplied from said other information processing apparatuses and transfer information containing the key needed to decrypt said value information;

a storage step of storing said transfer information received by said reception step;

a deletion step of deleting said transfer information stored by said storage step when an appropriate control signal is received from said other information processing apparatuses; and

a sending step of sending an appropriate reply signal when said transfer information is deleted by said deletion step.

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